

may receive a control signal for controlling a movement of a selection region for selecting the object from the mobile terminal 100 based on the first input of the mobile terminal 100. The selection unit 200 may select the object by moving the selection region according to the received control signal.

[0280] The output unit 230 is used to output an audio signal, a video signal, or an alarm signal, and may include a display unit 231, a sound output module 232, and an alarm unit 233. The display unit 231 displays information processed by the display device 200. For example, the display device 200 may display an object list. The object list may include an image indicating contents, an icon, a title, etc. The object list may be displayed in a GUI form.

[0281] According to an exemplary embodiment, the display unit 231 may display an indication for selecting the object based on the first input of the mobile terminal 100 on a screen. For example, the display unit 231 may indicate a border of an object in which the selection region is shown as a box, increase a size of the object compared to other objects, or make the object blink on and off.

[0282] The sound output module 232 outputs audio data received through the communication unit 210 or stored in the storage unit 250. The sound output module 232 may include a speaker, a buzzer, etc.

[0283] The alarm unit 233 outputs a signal for notifying an occurrence of an event of the display device 200. An example of the event that occurs in the display device 200 may include power on/off, message reception, complete reception of broadcasting contents, object selection, etc.

[0284] The sensing unit 240 may sense a user input of the mobile terminal 100. For example, the sensing unit 240 may sense at least one of the first input of the mobile terminal 100 for selecting the object displayed on the display device 200 and a second input for obtaining additional information of the selected object.

[0285] The sensing unit 240 according to an exemplary embodiment may include a camera 241 and a microphone 242. The camera 241 according to an exemplary embodiment 241 may include a depth camera, a multi-view camera, etc. The depth camera measures distances between objects in a scene in real time by using a time-of-flight (TOF) technology. The measured distance values may be output as depth images and used to manufacture a high quality depth map of the scene, along with a binocular camera or the multi-view camera.

[0286] In a case where the user input of the mobile terminal 100 is a motion input or a bending input, the sensing unit 240 may sense a movement of the mobile terminal 100 or a bending motion thereof through the camera 241.

[0287] In a case where the user input of the mobile terminal 100 is a voice input, the sensing unit 240 may recognize or analyze a user's voice through the microphone 242.

[0288] The storage unit 250 may store a program for processing or controlling the control unit 260. The storage unit 250 may perform a function of storing input and output data. For example, the input and output data may include contents (for example, a still image, a moving image, music, a document, an application, link information, etc.) obtained from the server 300.

[0289] The storage unit 250 may include at least one storage medium selected from the group consisting of flash memory, hard disk type memory, multimedia card micro

type memory, card type memory (for example, SD memory, XD memory, or the like), RAM, SRAM, ROM, EEPROM, PROM, magnetic memory, a magnetic disk, and an optical disk. In addition, the display device 200 may operate as a web storage facilitator for performing a storing function on the Internet.

[0290] The control unit 260 controls the overall operation of the display device 200. That is, the control unit 260 may generally control the communication unit 210, the selection unit 220, the output unit 230, the sensing unit 240, and the storage unit 250.

[0291] The control unit 260 according to an exemplary embodiment may control a movement direction of the selection region for selecting the object, a moving speed of the selection region, and the number of objects displayed on the screen of the display device 200 based on the first input of the mobile terminal 100. For example, in a case where the user moves the mobile terminal up and down and left and right, the selection region on the display device 200 may be moved up and down left and right, and, in a case where the user moves the mobile terminal 100 fast, the selection region may be moved by several spaces. In a case where the user moves the mobile terminal 100 in a +Z axial direction, the number of objects displayed on the screen of the display device 200 may increase, and, in a case where the user moves the mobile terminal 100 in a -Z axial direction, the number of objects displayed on the screen of the display device 200 may decrease.

[0292] According to an exemplary embodiment, the control unit 260 may convert the first input received from the mobile terminal 100 to the control signal for controlling the movement of the selection region according to a control protocol of the display device 200. For example, the control unit 260 may generate the control signal for moving the selection region by one space every time a predetermined gyro sensor value (for example, 10 deg/sec) greater than a threshold value is received from the mobile terminal 100.

[0293] According to an exemplary embodiment, the control unit 260 may extract additional information from the contents corresponding to the selected object.

[0294] FIG. 16 is a flowchart illustrating a method in which the display device 200 provides information, according to an exemplary embodiment. Referring to FIG. 16, the method in which the display device 200 provides information according to an exemplary embodiment includes operations sequentially performed by the display device 200 of FIG. 15. Thus, although omitted below, the above descriptions regarding the display device 200 of FIG. 15 may also apply to the method in which the display device 200 provides information of FIG. 16.

[0295] In operation S1610, the display device 200 may receive a first input of the mobile terminal 100 and select at least one object displayed on a screen. The first input of the mobile terminal 100 according to an exemplary embodiment may include at least one of a motion input, a key input, a touch input, a bending input, and a voice input. For example, a user may select at least one object displayed on the screen of the display device 200 through a 3D motion input for moving the mobile terminal 100 in 3D directions of X, Y, and Z axes.

[0296] According to an exemplary embodiment, the display device 200 may receive a signal that is generated by the mobile terminal 100 based on the first input of the mobile terminal 100 and controls a movement of a selection region